CHAPTER 5: CONSULTATION AND COORDINATION

5.1 INTRODUCTION

This section describes the consultation and coordination that has occurred during the preparation of this document. Consultation, coordination, and public involvement have been integral to identifying relevant issues and concerns and to make sure these issues are addressed. This was accomplished primarily through public meetings and workshops, informal *and formal agency* meetings, individual contacts, website updates, news releases, and *Federal Register* notices.

5.1.1 ORGANIZATIONS AND AGENCIES CONSULTED

During the NEPA decision-making processes, the NPS is required to consult with certain American Indian tribes, as well as with federal and state agencies and entities because of jurisdictional responsibilities (40 CFR 1502.25). This section documents these consultation and coordination efforts. Consultation will be an ongoing effort through completion of a final document and agency decision.

5.1.1.1 TRIBAL CONSULTATIONS

In keeping with the provisions of the National Environmental Policy Act, National Historic Preservation Act, National Park Service Management Policies 2001, Executive Memorandum on Government-to-Government Relations with Native American Tribal Governments; Executive Order 13007; Executive Order 13175; 512 Department of the Interior Manual [DM] 2; and Director's Order #71: Relationships with Indian Tribes, the NPS established regular consultation with American Indian tribes to address issues and concerns related to the current revisions of the Colorado River Management Plan. Table 5-1 lists the Tribal consultations that have occurred during the development of this document.

TABLE 5-1: AMERICAN INDIAN TRIBES CONSULTED

Tribal Nation	Nature of Consultations
Havasupai Tribe	Postal updates, personal contacts with the cultural resource representative, and two meetings with tribal representatives. Request for review and comment on DEIS and invitation to participate in Section 106 programmatic agreement.
Hopi Tribe	Postal updates, personal contacts with the cultural resource representative, and three meetings with tribal representatives. Request for review and comment on DEIS and invitation to participate in Section 106 programmatic agreement.
Pueblo of Zuni	Postal updates and personal contacts with the cultural resource representative. Request for review and comment on DEIS and invitation to participate in Section 106 programmatic agreement.
White Mountain Apache Tribe (representing the Yavapai-Apache Nation)	Postal updates, meeting with tribal representatives, and personal contacts with the cultural resource representative. Request for review and comment on DEIS and invitation to participate in Section 106 programmatic agreement.
Southern Paiute Consortium	Postal updates, personal contacts with the cultural resource representative, and two meetings with the tribal representatives. Request for review and comment on DEIS and invitation to participate in Section 106 programmatic agreement.
San Juan Southern Paiute Tribe	Invitation to enter into consultation. Request for review and comment on DEIS and invitation to participate in Section 106 programmatic agreement.
Navajo Nation	Postal updates, personal contacts with the cultural resource and tribal representatives, and <i>numerous</i> meetings with the Bodaway/Gap <i>Planning Team and</i> Chapter members and Navajo Nation representatives. <i>Request for review and comment on DEIS and invitation to participate in Section 106 programmatic agreement.</i>
Hualapai Tribe	Cooperating agency. Frequent consultations, both in meetings and personal contacts via telephone and e-mail, included development of alternatives, impact identification, and review of administrative drafts. Request for review and comment on DEIS and invitation to participate in Section 106 programmatic agreement.

Issues identified during tribal consultations included the following:

- The canyon needs an opportunity to "rest" during the off-season.
- Trespass and nonpayment of fees for access onto tribal lands is a significant concern for the Navajo Nation, the Hualapai Tribe, and the Havasupai Tribe.
- Certain sites, such as Deer Creek, the Little Colorado River confluence, and various natural springs, have special significance to some tribes and should be managed to minimize inappropriate behavior, crowding, and resource degradation.
- River runners do not have a clear understanding of the spiritual, social, economic, and historic significance of the Colorado River to its affiliated tribes. This lack of knowledge is evident in the incidents of inappropriate behavior in the river corridor, including trespass, intentional damage to resources, and disregard of tribal laws and regulations. All tribes requested that visitor education be enhanced to address these issues.
- Some tribes requested the opportunity to obtain full-river commercial use permits.
- Some tribes expressed concern over being able to access important traditionally significant sites and requested that the park work to ensure such access.
- Several issues that were not related to the *Colorado River Management Plan* were identified. Park personnel committed to address these issues in the appropriate venues, such as the revisions of the *Backcountry Management Plan*.
- Some tribes offered guidance on appropriate levels and types of river use, including the appropriateness or inappropriateness of motorized transport and the effects of visitation on resources.
- Some tribes clarified their social, spiritual, and economic connection to the river and they suggested measures to strengthen or maintain those connections.

5.1.1.2 ARIZONA STATE HISTORIC PRESERVATION OFFICER

The 1966 National Historic Preservation Act, as amended in 1992, requires federal agencies to consult with the state historic preservation officer and the Advisory Council on Historic Preservation (Council) regarding undertakings that may affect historic properties. Consultation by the NPS with the state historic preservation officer (SHPO) has occurred informally during the development of this Draft Environmental Impact Statement. A formal consultation letter was sent in February 2004, and consultations are ongoing as of the release of this document and it was determined that implementation of the Colorado River Management Plan could have an adverse effect on National Register eligible heritage resources in the Colorado River corridor. For this reason, a Section 106 programmatic agreement to avoid, minimize, or mitigate these potential effects was established among the Council, the SHPO, Grand Canyon National Park, the Navajo Nation, and the Hualapai Tribe.

Relevant consultation documents are presented in Appendix F of this document.

5.1.1.3 GRAND CANYON-PARASHANT NATIONAL MONUMENT

As part of the Arizona Strip Interagency Planning process, the planning staff made monthly progress reports to Grand Canyon-Parashant National Monument and Lake Mead National Recreation Area staff. The national monument staff was also consulted to develop alternatives and identify impacts for passenger exchanges at Whitmore.

5.1.1.4 CORE TEAM—HUALAPAI TRIBE, LAKE MEAD NATIONAL RECREATIONAL AREA, AND GRAND CANYON NATIONAL PARK

The Hualapai Tribe occupies a 992,463-acre reservation south of the Colorado River. In 2000, Grand Canyon National Park, Lake Mead National Recreation Area, and the Hualapai Tribe initiated formal consultation to address management issues on the Colorado River. This resulted in a "Memorandum of Understanding" that recognized the Area of Cooperation as that portion of the Colorado River from approximately RM 165 (*upstream of* National Canyon) to the RM 277, the boundary between Grand Canyon and Lake Mead. The "Memorandum of Understanding" provided a process to develop mutually agreed upon operational and management protocols applicable within the Area of Cooperation (AOC). Management issues pertaining to the AOC are addressed in meetings of a standing federal-tribal Core Team, which includes representatives of the Hualapai Tribe, Grand Canyon National Park, and Lake Mead National Recreation Area. Primary committees of the Core Team address issues of law enforcement, permitting, fire management, and revision of the river management plan, among others. Procedural steps for facilitating negotiation and consensus building among the parties are outlined in the Memorandum of Understanding. Grand Canyon provided updates on the river management planning process and common issues as part this interagency process. Additionally, members of the CRMP subcommittee of the Core Team met regularly to address alternative development, data collection and synthesis, issue identification, impact analysis, and integration of comments into draft versions of the Draft Environmental Impact Statement. The MOU for the Area of Cooperation is in effect, although Core Team meetings were suspended in October 2004.

When the park re-initiated the planning process as required by the settlement agreement, the Hualapai Tribe requested and was granted cooperating agency status, and a cooperative agreement was signed by Grand Canyon Superintendent Joseph Alston and Hualapai tribal Chairperson Louise Benson on May 14, 2003. In accordance with CEQ regulations (40 CFR 1501.6), lead agencies are to "use the environmental analysis and proposals of cooperating agencies with jurisdiction by law or special expertise, to the maximum extent possible." The Hualapai Tribe provided essential data on the affected environment and assisted in the development of alternatives and mitigation measures, and reviewed and commented on administrative drafts of the DEIS.

5.1.1.5 U. S. FISH AND WILDLIFE SERVICE

In compliance with Section 7 of the Endangered Species Act of 1973, as amended, *a Biological Assessment was submitted and* formal consultation was initiated *on June 24, 2005* following determination of *the two modified* preferred alternatives. Informal consultations, initiated in

March 2004, resulted in the identification of *ten* special status species (bald eagle, California condor, Mexican spotted owl, southwestern willow flycatcher, Yuma clapper rail, humpback chub, razorback sucker, Kanab ambersnail, *desert tortoise*, and California brown pelican) and two candidate species for listing as threatened or endangered species (yellow-billed cuckoo and relict leopard frog). *The NPS has incorporated recommended mitigations into the FEIS in Section 4.2.9, Special Status Species. The Biological Assessment is included in Appendix F.*

5.1.1.6 NPS INTERDISCIPLINARY TEAM

The NPS Interdisciplinary Team met frequently throughout the development of the Draft Environmental Impact Statement. Team members are listed in Table 5-2.

5.1.2 PUBLIC INPUT TO THE PLANNING PROCESS

On June 13, 2002, the NPS issued a Notice of Intent in the *Federal Register* to prepare an environmental impact statement for the Colorado River Management Plan. As stated in the notice, "The purpose of this EIS/CRMP is to update management guidelines for the Colorado River corridor through Grand Canyon National Park." This announcement began the public scoping process, and a notice to extend the public scoping period was printed in the *Federal Register* on September 23, 2002.

During the public scoping period, which extended from June 13 to November 1, 2002, the NPS sought public input to reaffirm previously identified agency and public issues and to identify any new public issues and concerns. Scoping is required for documents prepared in compliance with the National Environmental Policy Act, including environmental impact statements, to determine the scope of the document—what will be covered and in what detail. The scoping process must be open to the public; state, local, and tribal governments; and affected federal agencies. The objectives of scoping are:

- Involve as many interested parties as possible in the environmental review process.
- Provide clear, easily understood, factual information to potentially affected parties.
- Provide meaningful and timely opportunities for public input.
- Identify, consider, and evaluate significant issues raised by interested parties to assist in the preparation of the *Colorado River Management Plan and Environmental Impact Statement*.
- Identify and eliminate from detailed study the issues that are not significant.
- Consider public comments throughout the decision-making and review process.

5.1.2.1 PUBLIC SCOPING MEETINGS

As part of the scoping process, Grand Canyon National Park retained the services of The Mary Orton Company to help organize and manage a series of public meetings. More than 1,000

people attended a total of seven such meetings, which were held on the dates and in the communities listed below.

August 1, 2002	Denver, Colorado
August 6, 2002	Sandy, Utah (suburb of Salt Lake City)
August 8, 2002	Flagstaff, Arizona
August 13, 2002	Las Vegas, Nevada
August 15, 2002	Mesa, Arizona (suburb of Phoenix)
September 30, 2002	Towson, Maryland (suburb of Baltimore)

October 2, 2002 Oakland, California

The meetings were structured as open houses. Information about the planning process was presented through posters, handouts, and a large map of the project area. NPS personnel were available to answer questions, and rooms were provided for facilitator-led discussion groups. Attendees were invited to write comments on flipchart tearsheets and a map, to provide comments orally to a court reporter, and to submit written comments. A form and a permit-related questionnaire were provided for that purpose. Comments made during the discussion groups were recorded by the facilitators on flip charts.

5.1.2.2 REVIEW AND EVALUATION OF PUBLIC SCOPING COMMENTS

Written public comments were submitted to the planning team by e-mail, U.S. mail, and hand delivery, as well as at the open house meetings. Members of the planning team read through every submission, identified specific comments within each submission, and coded them according to criteria developed for the process. When the initial review process was completed, a total of 55,165 comments were identified within the 13,770 submissions. Organization and analysis of the submissions were completed with the assistance of SWCA Environmental Consultants, a firm retained to help develop the environmental impact statement.

Additionally, previously identified agency and public issues were compiled from the "Summary of Public Comment" from the 1997 *Colorado River Management Plan* scoping process conducted in April 1998. These comments were included in the 2002 scoping process database.

Almost every major comment received in 1997 was reiterated in 2002, plus several more. Given the number of comments received, the variations in detail were substantial. While it was not possible to adequately summarize every specific suggestion offered by the public in this process, the major issues stood out and were consistent with those raised in 1997. Information about the 2002 scoping process was disseminated to the public through the park's *Colorado River Management Plan* Internet site, press releases, mailings, and public meetings. A summary table of comments is presented in Appendix B, as well as on the website. The major issues raised in the 2002 scoping comments are as follows:

- Access and visitor services
- Motors and aircraft use

- Allocation and the noncommercial permit system
- Level of use/crowding, trip length, group size
- Resource protection, tribal issues, NPS regulations

5.1.2.3 STAKEHOLDER WORKSHOPS AND EXPERT PANEL MEETINGS

Two stakeholder workshops were conducted during the development of the *Draft Environmental Impact Statement* and involved representatives from nine stakeholder groups, including private boaters, outfitters, wilderness coalition representatives, ecological concerns, researchers, educators, commercial customers, commercial river guides, and people with disabilities. All of the affiliated tribes were invited to participate in the workshops. None of the tribes chose to have representatives participate in the workshops, but some tribal representatives did attend as observers.

On June 24 and 25, 2003, the Mary Orton Company conducted two focused stakeholder workshops and an evening public workshop as part of the process to revise the *Colorado River Management Plan*. These workshops did not re-open the public scoping period, but assisted the CRMP planning team in clarifying issues for the draft impact statement. The goal of the workshops was to clarify areas of agreement and disagreement among stakeholders and the public on what the park should include in a full range of reasonable alternatives in the impact statement. There were two issues of concern:

- Allocation of recreational use
- Motor use on the river

In January 2003 the Mary Orton Company held two more workshops to enable stakeholders to give the park more detailed and in-depth information and to identify areas of consensus. The purpose of the panels was to provide input from academics, researchers, practitioners and other stakeholders.

- Expert Panel #1: Carrying Capacity, Seasonality, and Group Size
- Expert Panel #2: Allocation of Recreational Use Among User Groups
- Stakeholder Workshops #1: Spectrum of Recreational Services Offered to the Public
- Stakeholder Workshop #2: Private River Trip Permit Distribution System

5.1.2.4 Public Comment Period

The Draft CRMP Environmental Impact Statement (DEIS) was released for public review in the fall of 2004. A 90-day public comment period on the CRMP/DEIS began when a Notice of Availability of the Draft was published in the Federal Register on October 8, 2004. Given the complexity of the document and the intense interest in it on behalf of the public, the 90 day public comment period was extended from the ending date of January 7, 2005 to February 1, 2005. From November 10 through December 3, 2004, public meetings were conducted in

seven cities nationwide to present the DEIS and solicit public comment. These meetings, presented below, were attended by approximately 1,000 people:

November 8, 2004	Denver, Colorado
November 10, 2004	Salt Lake City, Utah
November 16, 2004	Washington, D.C.
November 18, 2004	Las Vegas, Nevada
November 22, 2004	Flagstaff, Arizona
November 30, 2004	Phoenix, Arizona
December 2, 2004	San Francisco, California

Approximately 10,000 written responses were received during the public review period containing approximately 6,000 substantive and 30,000 nonsubstantive comments. These comments are summarized in Volume III of this document.

Similar to the Public Scoping Meetings, the Public Comment meetings were structured as open houses. Information about the Draft Environmental Impact Statement and the planning process was presented through posters, handouts, and a slide presentation and NPS personnel were available to answer questions. Attendees were invited to write comments on flipchart tearsheets, to provide comments orally to a court reporter, and to submit written comments. An NPS comment form and noncommercial permit questionnaires (Permit System Options Form, Adjustable Split Allocation Form, All User Registration Form) were provided for that purpose.

5.1.2.5 PLAN WEBPAGE

The plan website <www.nps.gov/grca/crmp> has been a useful tool for disseminating information about the status of the plan to the public. Information available on the website includes:

- History and background information
- Plan progress update letters (current and archived)
- Soundings newsletters (current and archived)
- Press releases (current and archived)
- Frequently Asked Questions
- Photos and informational posters and handouts from 2002 public scoping meetings
- 2002 public scoping issue analysis
- "Summary of Public Comment" from 1997 scoping process
- The 1979 Colorado River Management Plan, the 1979 Colorado River Management Plan and Final Environmental Impact Statement, and the 1989 Colorado River Management Plan

- The 2004 Draft Environmental Impact Statement for the Colorado River Management Plan
- Stakeholder workshop handouts, photos, and posters
- Handouts, posters, photos and the slideshow from public meetings
- Recent use statistics, graphs, and reports
- January 2002 court settlement documents
- Guiding principles
- Media Advisories
- Federal Register documents
- NPS laws and policies

TABLE 5-2: INTERDISCIPLINARY TEAM MEMBERS

ID Team Member	NPS Department
Michael Anderson	Cultural Resources, Science Center
William Allen	Trails, Maintenance and Engineering
Janet Balsom	Cultural Resources Branch Chief, Science Center
Jill Beshears	Environmental Compliance, Science Center
Carl Bowman	Natural Resources/Air Quality, Science Center
Mathieu Brown	Biological Technician, Science Center
David Chapman	Wilderness/Lees Ferry Ranger/Visitor and Resource Protection
Cole Crocker-Bedford	Natural Resources Branch Chief, Science Center
Jeffrey Cross	Project Manager, Science Center Director
Lori Crystal	Lead Outdoor Recreation Planner, Science Center
David Desrosiers	Wilderness/River District, Visitor and Resource Protection
J. Grace Ellis	Lead Cultural Resource Specialist, Science Center
Rick Ernenwein	Lead Planner, Science Center
Jennifer Dierker	Cultural Resources/Archeology, Science Center
Jacob Fillion	Education, Interpretation
Mae Franklin	Cultural Resources/Tribal Liaison, Science Center
Lenore Grover-Bullington	Lead Natural Resources Specialist, Science Center
Nick Hardig	Chief of Concessions
Kirsten Heins	Permits Program, Visitor and Resource Protection
Linda Jalbert	Lead Wilderness Planner, Science Center
Mary Killeen	Special Assistant to the Superintendent
Allen Keske	Concessions Specialist, Concessions
Lisa Leap	Cultural Resources/Archeology, Science Center
Mark Lellouch	Socioeconomics/Special Assistant
Elaine Leslie	Natural Resources/Wildlife, Science Center
Lori Makarick	Natural Resources/Vegetation, Science Center
Leah McGinnis	Management Assistant, Superintendent's Office
Michael McGinnis	Wilderness/River District, Visitor and Resource Protection
Chris Mengel	Wilderness/River District, Visitor and Resource Protection
Maureen Oltrogge	Public Affairs, Superintendent's Office
John Rihs	Natural Resources/Earth Sciences, Science Center
Laura Shearin	Contracts, Concessions
Rachel Stanton	Environmental Protection Assistant, Maintenance
Steve Sullivan	Permits Program, Visitor and Resource Protection
R.V. Ward	Natural Resources/Wildlife, Science Center
Ken Weber	Social Science, Science Center
Sara White	Environmental Compliance

5.1.3 LIST OF AGENCIES, ORGANIZATIONS, BUSINESSES, AND INDIVIDUALS WHO RECEIVED THE DRAFT PLAN

There are over 1,500 entries on the mailing list for this plan with physical mailing addresses, and an additional 5,000 entries with e-mail addresses only. Compact disks (CDs) are being sent to all persons on the list with physical mailing addresses, and e-mail messages are being sent to all persons on the list with information about how to obtain a copy. In addition, the document is being posted on the Internet so that people can download document files from the park's Colorado River Management Plan website (http://www.nps.gov/grca/crmp). Copies are also being made available at the main library in the cities listed below. A complete list of individuals receiving copies of the *Draft Environmental Impact Statement* is on file at park headquarters.

The following is a partial list of the agencies, offices, and organizations to whom this document is being sent. As requests for copies are received during public review of this document, the list will be updated.

Federal Agencies

Advisory Council on Historic Preservation

Department of Agriculture

Coconino National Forest

Kaibab National Forest

Department of the Interior

Bureau of Indian Affairs

Bureau of Land Management

Arizona State

Arizona Strip

Grand Canyon-Parashant National Monument

Grand Staircase-Escalante National Monument

Vermillion Cliffs National Monument

Bureau of Reclamation

NPS

Arizona State Coordinator

Bryce Canyon National Park

Canyonlands National Park

Flagstaff Area Office

Grand Canyon-Parashant National Monument

Glen Canyon National Recreation Area

Intermountain Regional Office

Lake Mead National Recreation Area

Pipe Springs National Monument

Utah State Coordinator

Zion National Park

United States Fish and Wildlife Service

U. S. Geological Survey

U.S. Environmental Protection Agency

Arizona Congressional Delegation

Office of Senator John McCain

Office of Senator John Kyl

Office of Congressman Raul Grijalva

Office of Congressman J. D. Hayworth

Office of Congressman Jim Kolbe

Office of Congressman Ed Pastor

Office of Congressman Rick Renzi

Office of Congressman John Shadegg

Arizona State Agencies

Office of the Governor
State Historic Preservation Office
Department of Environmental Quality
Department of Transportation and Planning
Game and Fish Department

Indian Tribal Governments

Havasupai Tribe
Hopi Tribe
Hualapai Tribe
Navajo Nation
Paiute Indian Tribe of Utah
San Juan Southern Paiute Tribe
Pueblo of Zuni
White Mountain Apache Tribe

Regional, County, Local and City Governments

City of Flagstaff

City of Fredonia

City of Kanab

City of Las Vegas

City of Page

City of Phoenix

City of Williams

Coconino County Board of Supervisors

Organizations and Businesses

American Canoe Association

American Whitewater

Arizona Wilderness Coalition

Grand Canyon Association

Grand Canyon Field Institute

Grand Canyon National Park Foundation

Grand Canyon Private Boaters Association

Grand Canyon Resort Corporation

Grand Canyon River Guides

Grand Canyon River Operators Association

Grand Canyon Trust

Grand Canyon Wildlands Council

Hualapai River Runners

Living Rivers

National Parks Conservation Association

River of Dreams

River Runners for Wilderness

Sierra Club

Southern Utah Wilderness Alliance

Southwest Rivers

The Nature Conservancy

The Wilderness Society

River Concessioners

Arizona Raft Adventures, Inc.

Arizona River Runners, Inc.

Canyoneers, Inc.

Canyon Expeditions, Inc.

Colorado River & Trail Expeditions, Inc.

Diamond River Adventures, Inc.

Grand Canyon Discovery, Inc.

Grand Canyon Expeditions Company

Hatch River Expeditions, Inc.

Moki Mac River Expeditions, Inc.

OARS, Inc./Grand Canyon Dories, Inc.

Outdoors Unlimited River Trips

Tour West, Inc.

Western River Expeditions, Inc.

Wilderness River Adventures

Local Libraries

Denver, Colorado

Flagstaff, Arizona

Las Vegas, Nevada

Phoenix, Arizona

Salt Lake City, Utah

San Francisco, California

5.1.4 LIST OF PREPARERS AND CONTRIBUTORS

The individuals who helped prepare this *Draft or Final Environmental Impact Statement* or who contributed to its preparation are listed below.

5.1.4.1 PREPARERS

Name	Responsibility	Education	Years Experience
NPS/Grand Can	yon National Park	•	•
Janet Balsom	Cultural Resources Branch Chief Science Center	B.A. Anthropology M.A. Anthropology	25
Carl Bowman	Natural Resources/Air Quality Science Center	B.S. Biology	13
Jeffrey Cross	Project Manager Science Center Director	B.S. Zoology M.S. Zoology PhD. Fisheries Biology	32
Lori Crystal	Lead OutdoorRecreation Planning Science Center	B.S. Leisure Studies & Resource Mgt. M.S. Resource Recreation & Tourism	19
J. Grace Ellis	Lead Cultural Resources Specialist Science Center	BA Anthropology	15
Rick Ernenwein	Planning Team Leader Science Center	B.S. Renewable Natural Resources	26
Lenore Grover- Bullington	Lead Natural Resources Specialist Science Center	B.S. Biology M.S. Forestry	20
Linda Jalbert	Lead Wilderness Planner Science Center	B.S. Recreation	17
Michele A. James	Wildlife Biologist	B.S. Wildlife Biology/Technical Journalism M.L.S. Sustainable Communities and the Environment	17
Mark Lellouch	Business Planner	B.S. Mathematics-Computer Science, Brown University M.S. Computer Science, Harvard University M.B.A., Stanford Graduate School of Business	14
Elaine Leslie	Natural Resources/Wildlife Science Center	B.S. Wildlife Biology/Environmental Science M.S. Environmental Science	30
Rich Lichtkoppler	Natural Resource Economist, US Bureau of Reclamation	B.S. Business Administration M.S. (Park and Recreation Administration Ph.D. Resource Economics	16
Lori Makarick	Natural Resources/Vegetation Science Center	B.A. Conservation Biology M.S. Restoration Ecology	12
John Rihs	Natural Resources/Earth Sciences Science Center	B.S. Geology, M.S. Environmental Systems Applied Geology	14
Joe Shannon	Aquatic Resources	B.A. Marine Biology M.S. Aquatic Biology Ph.D. Aquatic Biology	25
Steve Sullivan	Permits Program Visitor & Resource Protection	B.A. Liberal Arts M.S. Environmental Education	12
R.V. Ward	Natural Resources/Wildlife Science Center	B.S. Zoology M.S. Wildlife Ecology J.D. (Natural Resources Law)	35
Ken Weber	Social Science Science Center	B.A. Social Science M.A. Cultural Anthropology M.B.A. Organizational Management	33

5.1.4.2 CONTRIBUTORS (SORTED BY AFFILIATION)

			Years
Name	Responsibility	Education	Experience
NPS/Grand Cany	on National Park		
Emma P.	Ecologist/Research Coordinator	B.S. Education	20
Benenati	Science Center	M.S. Earth Science	
		PhD Biology	
Mathieu Brown	Biological Technician	B.S. Business Administration	5
	Science Center	B.A. Liberal Studies/Natural Resources	
David Chapman	Wilderness/Lees Ferry Ranger/Visitor	B.S.E. Recreation Education	20
'	and Resource Protection		
Laurie Domler	NEPA/106 Specialist	B.A. Planning	18
		M.S. Natural Resource Studies	
Jacob Fillion	Environmental Education Branch Chief	B.A. Latin American Studies M.A. Education	21
Nick Hardigg	Chief of Concessions	B.A. Environmental Science	16
Mok Haraigg	Office of Concessions	M.S. Business Administration	10
Kirsten Heins	Permits Program	B.S. Forest Recreation Resources	6
	Visitor and Resource Protection		
Mary Killeen	Planning Team Assistant	B.A. Political Science	26
Look McCinnia	Superintendent's Office	D.A. Duainasa Administration	1.1
Leah McGinnis	Acting Management Assistant, Superintendent's Office	B.A. Business Administration	14
Michael	Wilderness/River District	B.S. Outdoor Recreation Management	19
McGinnis	Visitor and Resource Protection		.0
Ken McMullen	Overflights and Natural Sounds	B.S. Range and Wildlands Science	23
	Program Manager	MS Range Science	
Chris Mengel	Wilderness/River District	A.S.B.S. Biology	16
	Visitor & Resource Protection		
Diana	Filming Permits Coordinator	B.S. Natural Resources	12
Pennington	Superintendent's Office		
Bob Rossman	NPS Natural Sounds Program	B.S. Watershed Science and	25
	Washington Office	Hydrology	
Laura Shearin	Concessions Management	B.A. Economics/Accounting, Music B.S.	9
		Math Education	
Karen Trevino	Chief, NPS Natural Sounds Program,	B.S. Communications /	16
	Washington Office	Political Science J.D. (Environmental Law emphasis)	
Christine L. Turk	Regional Environmental Quality	B.A. Biological Sciences	32
555 <u>2</u>	Coordinator, Intermountain Region	2 2.6.6g.ca 26.6.1666	~
014/0.4 E :	1		
	ental Consultants*	D.S. Marketing	20
Mike Boyle	Deputy Project Manager—NEPA	B.S. Marketing B.S. Geography	20
Erin Cole	Hydrologist	B.S. Geology	13
	,	M.S. Geoscience	. •
Lisa Dickerson	Administrative Record		6
Karen Epperly	Administrative Record		9
Gary Galbraith	Biologist	B.S. Wildlife and Fisheries Sciences	18
Glen Hanson	NEPA Specialist	B.S. Anthropology	28
		M.A. Anthropology	

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^{*} SWCA Environmental Consultants, Inc., and their team of subcontractors listed below were preparers during the early stages of the planning process from September 2002 through March 2004, including preparation of early drafts of this environmental impact statement. However, the SWCA team has not been involved with changes to the draft document since that time.

			Years
Name	Responsibility	Education	Experience
Jim Hasbargen	Archaeologist	B.S. Biology	8
		M.S. Quaternary Sciences	
		M.A. Anthropology	
Dorothy House	Editor, Writer, NEPA Specialist	B.A. Social Sciences	30
		M.A. Librarianship	
Kim Hutson	Water Quality Specialist, Planner	B.A. Planning	10
		M.S. Water Resources Management	
Ashley Jenkins	GIS Technician	GIS Certificate	4
Matt Lauretta	Biologist	B.S. Environmental Science	3
Bill Leibfried	Aquatic Biologist	B.S. Biological Sciences M.S. Ecology	22
Ken MacDonald	Project Manager - NEPA	B.A. Biological Sciences M.B.A. Business Administration	15
Jessica Maggio	Administrative Assistant	B.A. Anthropology	2
Michael O'Hara	Archaeologist	B.A. American Studies	16
	3 1 1 1 3 1 1	M.A. Library and Information Science	
		M.A. Anthropology	
Donna Osborne	Administrative/Editor		22
Gordon Rakita	Statistics and Data Management	B.A. Anthropology	10
	ŭ	M.A. Anthropology	
		Ph.D. Anthropology	
Suzanne	Botanist	B.S. Botany	5
Rhodes			
John Thomas	NEPA Specialist	B.S. Natural Resource Management	15
Leslie Wagner	Biologist	B.S. Wildlife Biology	2
Environmental S	Science Associates		
Nancy Barbic	NEPA/DO 12 Specialist	B.S. Plant Ecology	12
Nicholas	Economics	M.P.P Public Policy	12
Carlson		M.A. Philosophy, Politics, and	
		Economics	
Brown-Buntin As	ssociates		
Bob Brown	Soundscape	B.A. Biological Sciences	32
Montgomery Wa			
Danny Kringle	Air Quality	B.A. Mathematics	26
URS Corporation	า		
Greg Sorensen	Editor	B.A. International Affairs	29
Independent Cor			
Joanna Bieri	Grand Canyon River Trip Simulator	B.S. Mathematics and Physics	4
	Modeler	M.S. Candidate	
Lynn Neal,	Archaeologist	B.A. Archaeology and Geology	13
EnviroSystems		M.A. Anthropology	
Management,			
Inc.		A D. A I' I A . II	10
Catherine A.		A.B. Applied Mathematics and	13
Roberts		Computer Science	
		Ph.D. Applied Mathematics and	
Do Challer	Divor Degraphian Chasiclist	Engineering Science	00
Bo Shelby,	River Recreation Specialist	B.A. Sociology, Psychology, and	28
Confluence Research		Literature M.A. Sociology	
Consultants		Ph.D. Sociology	
Doug Whittaker,	River Recreation Specialist	B.A. Geography	16
Confluence	Triver recreation openalist	M.S. Forest Management	10
Research		Ph.D. Human Dimensions in Natural	
Consultants		Resources	
Northern Arizona	l a University	Nesources	<u> </u>
Evan Hjerpe	Economics	B.S. Economics	3
-van rijerpe	Loononius	M.S. Forestry Economics	
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Name	Responsibility	Education	Years Experience
Yeon-Su Kim	Economics	B.S. Forestry M.S. Forest Resources Ph.D. Forest Resources	12
Hualapai Tribe			
Don Bay	Director Hualapai Department of Natural Resources	B.S. Wildlife	26
Steve Beattie	Grand Canyon Resort Corporation	B.S. Business	5
Clay Bravo	Assistant Director Hualapai Department of Natural Resources		25
Alex Cabillo III	Water Resource Program Manager	B.A. Psychology	11
Dr. Kerry Christensen	Senior Scientist	B.S., M.S. PhD Zoology	24
Jack Earhardt	Tribal Planner		30
Cisney Havatone	Air Program Manager	B.S. Elementary Education	9
Waylon Honga	Grand Canyon Resort Corporation	B.S. Business	10
Loretta Jackson	Tribal Historic Preservation Officer		13
Annette Morgan	Wildlife Fisheries and Parks Program Manager	B.S. Environmental Biology M.S. Fisheries	7
Dave Wegner	EMI Consultant	B.S., M.S. Aquatic Ecology and Engineering	25
Museum of Nort	hern Arizona		
Sonny Kuhr	Editor, NEPA Specialist	B.S. Biology/Environmental Science Emphasis	16